Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (previously presented) A system for use in a vehicle comprising:
 - a microphone array with at least two microphones; and
 - a superdirective beamformer with fixed superdirective filters;

where the superdirective beamformer is a regularized superdirective beamformer using a finite regularization parameter μ that is frequency dependent.

2-3. (canceled)

- 4. (previously presented) A system according to claim 1 where each superdirective filter results from an iterative design based on a predetermined maximum susceptibility.
- 5. (previously presented) A system according to claim 1 where each superdirective filter comprises a filter in the time domain.
- 6. (previously presented) A system according to claim 1 where the signal processing means further comprises at least one inverse filter for adjusting a microphone transfer function.
- 7. (previously presented) A system according to claim 6 where the at least one inverse filter comprises a warped inverse filter.
- 8. (previously presented) A system according to claim 6 where each inverse filter comprises an approximate inverse of a non-minimum phase filter.

Appl. No. 10/563,072 Amdt. dated 05/25/2010 Reply to Office action of 03/16/2010

- 9. (previously presented) A system according to claim 6 where each inverse filter is combined with a superdirective filter of the beamformer.
- 10. (previously presented) A system according to claim 1 where the beamformer comprises the structure of a generalized sidelobe canceller (GSC).
- 11. (previously presented) A system according to claim 1 where the beamformer comprises a minimum variance distortionless response (MVDR) beamformer.
- 12. (previously presented) A system according to claim 1 where the microphone array comprises at least two microphones arranged in an endfire orientation with respect to a first position.
- 13. (previously presented) A system according to claim 12 where the microphone array comprises at least two microphones arranged in endfire orientation with respect to a second position.
- 14. (previously presented) A system according to claim 13 where the at least two microphones in the first endfire orientation and the at least two microphones in the second endfire orientation comprise a microphone in common.
- 15. (previously presented) A system according to claim 1 where the microphone array comprises at least two subarrays.
- 16. (previously presented) A system according to claim 15 where the at least two subarrays comprise at least one microphone in common.
- 17. (previously presented) A system according to claim 1 further comprising a frame where each microphone of the microphone array is arranged in a predetermined position in or on the frame.

Appl. No. 10/563,072 Amdt. dated 05/25/2010 Reply to Office action of 03/16/2010

18. (previously presented) A system according to claim 17 where the predetermined position comprises a fixed position in or on the frame.

19. (previously presented) A system according to claim 1 where at least one microphone

comprises a directional microphone.

20. (previously presented) A system according to claim 19 where the directional

microphone comprises a directional microphone with a cardioid characteristic.

21. (previously presented) A system according to claim 19 where the directional

microphone comprises a differential microphone.

22. (previously presented) A system according to claim 1 comprising a vehicle coupled to

the microphone and the beamformer.

23. (currently amended) A system for use in a vehicle comprising:

a microphone array with at least two microphones and a superdirective

beamformer having fixed superdirective filters;

where the superdirective beamformers are configured with a predetermined

susceptibility that is based on a relative error of the microphone array;

where the relative error of the microphone array is a sum of mean square error of

transfer properties of each microphone in the microphone array and a gaussian error with

zero mean of microphone positions.

24. (canceled)

25. (previously presented) A system according to claim 23 where at least two

microphones in the microphone array are arranged in an endfire orientation with respect

to a first position.

Appl. No. 10/563,072 Amdt. dated 05/25/2010 Reply to Office action of 03/16/2010

- 26. (previously presented) A system according to claim 25 where at least two microphones in the microphone array are arranged in an endfire orientation with respect to a second position.
- 27. (previously presented) A system according to claim 23 where at least one microphone comprises a directional microphone.
- 28. (previously presented) A system according to claim 27 where the directional microphone comprises a directional microphone with a cardio characteristic.
- 29. (previously presented) A system according to claim 27 where the directional microphone comprises a differential microphone.